

WHAT IS CLAIMED IS:

5 <sup>sub a<sup>2</sup></sup> 1. A fiber optic cable, comprising:  
a tube defining an interior passage therein;

an optical ribbon disposed in the interior passage of the tube, the optical ribbon comprising a plurality of generally parallel optical fibers arranged in a generally planar array and bound together by a covering of a matrix material surrounding said generally planar array, the optical ribbon having an identifier visible at an outer surface of the matrix material, the identifier comprising at least two colored regions of different colors for conveying identifying information about the optical ribbon.

2. The fiber optic cable of claim 1, wherein at least one of the colored regions has a color selected to distinguish the optical ribbon from other optical ribbons and another of the colored regions has a color selected to denote a type of the optical fibers contained in the optical ribbon.

3. The fiber optic cable of claim 1, wherein the identifier for the optical ribbon comprises at least first, second, and third colored regions of different colors, the first and second colored regions serving to distinguish the optical ribbon from other optical ribbons and the third colored region denoting the type of the optical fibers contained in the optical ribbon.

4. The fiber optic cable of claim 3, wherein the first and second colored regions respectively denote first and second characters of a two-character identifier for the optical ribbon.

<sup>sub a<sup>3</sup></sup> 5. The fiber optic cable of claim 1, wherein the identifier for the optical ribbon comprises at least first, second, third, and fourth colored regions of different colors, the first, second, and third colored regions serving to distinguish the optical ribbon from other optical ribbons and the fourth colored region denoting the type of the optical fibers contained in the optical ribbon.

6. The fiber optic cable of claim 5, wherein the first, second, and third colored regions respectively denote first, second, and third characters of a three-character identifier for the optical ribbon.

5 7. The fiber optic cable of claim 1, wherein the colored regions comprise stripes arranged in a predetermined orientation with respect to the optical ribbon.

sub 8. The fiber optic cable of claim 1, wherein the stripes extend continuously  
au lengthwise along the optical ribbon.

9. The fiber optic cable of claim 1, wherein the colored regions comprise integrally formed parts of the covering of the optical ribbon.

10 10. The fiber optic cable of claim 1, wherein the colored regions extend transversely along the optical ribbon and are repeated at periodic intervals along the optical ribbon.

11. The fiber optic cable of claim 1, wherein the colored regions are provided on the optical ribbon in a predetermined arrangement that is repeated at periodic intervals  
15 along the optical ribbon.

12. The fiber optic cable of claim 1, wherein the colored regions serve to indicate an optical ribbon number and fiber type.

sub 13. The fiber optic cable of claim 1, wherein one of the colored regions serves to  
as indicate whether the optical fibers of the optical ribbon are single-mode or multi-mode  
20 optical fibers.

as  
cont

14. An optical ribbon, comprising:  
a plurality of optical fibers arranged generally parallel to one another in a  
generally planar array; and  
a covering of a matrix material surrounding said generally planar array so as to  
cover and bind together the optical fibers, wherein the optical ribbon has an identifier  
visible at an outer surface of the matrix material, the identifier comprising at least two  
colored regions of different colors conveying identifying information about the optical  
ribbon.

15. The optical ribbon of claim 14, wherein at least one of the colored regions has  
a color selected to denote an identifying number pre-assigned to the optical ribbon and  
another of the colored regions has a color selected to indicate a type of the optical fibers  
contained in the optical ribbon.

16. The optical ribbon of claim 14, wherein the colored regions comprise at least  
first, second, and third colored regions, the first and second colored regions respectively  
denoting first and second digits of the pre-assigned identifying number of the optical  
ribbon and the third colored region denoting the type of the optical fibers contained in the  
optical ribbon.

17. The optical ribbon of claim 14, wherein the colored regions comprise stripes  
arranged in a predetermined orientation with respect to the optical ribbon.

18. The optical ribbon of claim 14, wherein the colored regions extend  
continuously lengthwise along the optical ribbon.

19. The optical ribbon of claim 14, wherein the colored regions comprise  
integrally formed parts of the covering.

20. The optical ribbon of claim 14, wherein the colored regions are discontinuous  
in a lengthwise direction along the optical ribbon.



22. A method for making a fiber optic cable, comprising:

assigning a unique identifier having at least one character to each of a plurality of optical ribbons, each optical ribbon comprising a plurality of generally parallel optical fibers arranged in a generally planar array and bound together by a covering of matrix material surrounding said generally planar array, the optical fibers of each optical ribbon being of a predetermined type;

providing at least two colored regions of different colors visible on an outer surface of the matrix material of each optical ribbon, at least one of the colored regions having a color selected to denote said at least one character of the identifier for the optical ribbon and another of the colored regions having a color selected to denote the type of optical fibers in the optical ribbon; and

disposing the optical ribbons in at least one passage of a cable component.

23. The method of claim 22, wherein each optical ribbon is assigned a two-digit identifying number, and each optical ribbon has at least two colored regions of different colors respectively denoting the two digits of the identifying number.

24. The method of claim 23, wherein each digit comprises one of ten different integers from zero to nine, nine of said integers being respectively denoted by nine different colors and the tenth integer being denoted by absence of any color.

25. The method of claim 23, wherein each digit comprises one of ten different integers from zero to nine, said integers being respectively denoted by ten different colors.

26. The method of claim 22, wherein the optical fibers in each optical ribbon can be of at least two different types, and at least two different colors are used for denoting said at least two different types.

27. The method of claim 26, wherein an additional type of optical fibers is denoted by absence of any color.



5 29. A method for making an optical ribbon, comprising:  
arranging a plurality of optical fibers generally parallel to one another in a generally planar array;  
extruding a covering of matrix material over the generally planar array of optical fibers to cover and bind the fibers together; and  
applying a series of colored regions of different colors to the covering, in a predetermined arrangement visible at an outer surface of the covering, for conveying identifying information about the optical ribbon.

10 30. The method of claim 29, wherein the step of applying the colored regions is performed simultaneously with the step of extruding the covering.

31. The method of claim 30, wherein the covering of matrix material is extruded over the optical fibers through an extrusion die and the colored regions are applied by supplying colored material along with the matrix material into the extrusion die, such that the colored regions are formed integrally with the covering.

15 32. The method of claim 29, wherein the step of applying the colored regions is performed after completion of the step of extruding the covering.

33. The method of claim 32, further comprising the step of curing the matrix material after the extruding step, and wherein the step of applying the colored regions is performed prior to the step of curing the matrix material.

34. An optical ribbon, comprising:

a plurality of optical fibers arranged generally parallel to one another in a generally planar array, the optical fibers being arranged into at least two fiber sub-units each having at least one optical fiber; and

5 an outer matrix covering that encapsulates and binds together the fiber sub-units, the outer matrix covering comprising separate regions of a first matrix material adhered respectively to each of the fiber sub-units and a connecting region of a second matrix material joining adjacent fiber sub-units together, the first matrix material adhering to the fiber sub-units with a greater tenacity than does the second matrix material such that the  
10 outer matrix covering preferentially splits at the connecting region between fiber sub-units whereby the separate regions of the first matrix material tend to remain adhered to the fiber sub-units upon separation thereof.

35. The optical ribbon of claim 34, further comprising identifying markings visible at outer surfaces of the separate regions of the first matrix material.

15 36. The optical ribbon of claim 34, wherein the first matrix material has a higher modulus of elasticity than the second matrix material.



Sub 37. An optical ribbon, comprising:

5 a plurality of optical fibers arranged generally parallel to one another in a generally planar array, the optical fibers including at least one adjacent pair of optical fibers bound together by a connecting matrix material, the connecting matrix material being of a predetermined color for identifying said pair of optical fibers; and

an outer matrix covering that encapsulates and binds together the optical fibers, the outer matrix covering being sufficiently transparent that the color of the connecting matrix material is visible through the outer matrix covering.

38. The optical ribbon of claim 37, wherein there are a plurality of adjacent pairs  
10 of the optical fibers, each adjacent pair of optical fibers being bound together by  
connecting matrix material of a predetermined color for identifying said pair.

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39. An optical ribbon, comprising:

a plurality of optical fibers arranged generally parallel to one another in a generally planar array; and

a matrix covering that encapsulates and binds together the optical fibers, the matrix covering comprising a plurality of different colored regions formed of a first matrix material and bound respectively to the plurality of optical fibers for identifying the optical fibers, the matrix covering further comprising a second matrix material that intercedes between and maintains the colored regions substantially separate from one another, the first matrix material adhering to the optical fibers with a greater tenacity than the second matrix material, whereby the colored regions tend to remain adhered to the optical fibers.

40. The optical ribbon of claim 39, wherein the colored regions extend to and form part of an outer surface of the matrix covering.

41. The optical ribbon of claim 39, wherein the first matrix material has a higher modulus of elasticity than the second matrix material.

42. The optical ribbon of claim 39, wherein each colored region is bound to less than all of the outer surface of the respective optical fiber.